Exactly What Does Organic Buy? 2d Lt Sarah Overby

We're reminded everyday that we need to eat more fruits and vegetables to live long and healthy lives. However, walk into any supermarket and you're bombarded with not only hundreds of varieties of produce but now numerous types of varieties of produce. Should you pay 50% more for the organic product or save a buck and go for the conventional (non-organic) version? Is it just as healthy to eat 5 servings of conventional fruits and vegetables or does it have to be organic to keep you healthy? After all, what does the organic title signify?

Organic produce is defined as fruits and vegetables that have been grown without the use of conventional pesticides and artificial fertilizers. The only pesticide residues that still might exist are those persistent in groundwater and rain, and this amount is comparatively minute. Why do we care about pesticides? Have pesticides ever hurt anyone who consumed conventionally-grown produce? Marion Nestle, professor of food science at New York University, states in her book *What To Eat*:

"Pesticides are demonstrably harmful to farmworkers and to 'nontarget' wildlife, and they accumulate in the soils for ages. If they kill pests, can they be good for you? If they really were all that benign, there would be no reason for the government to bother to regulate them, but it does."

Although there have been no large studies to show that pesticides consumed in the diet are harmful to you, that does not mean that it will not be addressed in the future. Research demonstrates that the amount of pesticide use is increasing. One study sponsored by the Environmental Protection Agency (EPA) shows that the frequency of detection of a particular pesticide used on carrots tripled from 2001 to 2002. This pesticide was quadrupled in percent frequency of detection on wheat from 2002 to 2003 (so produce and other plants, for that matter, could now pose risks that have simply not been studied in the long-term).

The aforementioned EPA study focused on 23 elementary age children and clearly demonstrated the amount of pesticides evident in a conventional diet. Even before the children began the study, their urinalysis showed significant amounts of pesticide. This trend continued until they were placed on an all organic diet. Within 24 hours of switching, pesticide urine levels decreased to an almost undetectable amount and remained as such until they resumed conventional diets.

New evidence is also suggesting that pesticides in the bloodstream can be passed from a mother to her fetus. In 2005, the Red Cross collected blood from the umbilical cords of 20 children and found that an average of 21 different pesticides had crossed the placenta. Philip Landrigan, M.D. and professor of pediatrics and preventative medicine at Mount Sinai School of Medicine in New York City boasts of strong evidence that exposure of the fetus to certain types of pesticides can result in babies with small head circumference, reduced intelligence, and behavioral disturbances.

Ok, ok, so organic produce is expensive. Sometimes 75-100% more than the conventional product, but it might be worth it. However, is it worth it to purchase organic *everything* in the produce section? *Consumer Reports* magazine discusses a list they call "the dirty dozen." It is a list of fruits and vegetables that have been shown by the USDA's testing lab to carry much higher levels of pesticide residues (even after washing) that others do not. The magazine recommends that you buy these items organic as often as possible:

- Apples
- Bell Peppers
- Celery
- Cherries
- Imported Grapes
- Nectarines
- Peaches
- Pears
- Potatoes
- Red Raspberries
- Spinach
- Strawberries

These items might not look as pretty as their conventional counterparts, but in purchasing them, you are reducing your exposure to pesticides. Other options include local farmer's markets and farms that may offer organic produce, without carrying the higher price tag.

So what if the organic label just does not fit into your budget? It is more than likely still better to be consuming the recommended 5+ fruits and vegetables a day than avoiding conventionally-grown produce altogether. All fruits and vegetables provide fiber, antioxidants, and are packed with vitamins and minerals essential for healthy living. Produce in any shape or form remains a vital component of any diet. Research has not quantified any significant effects caused by pesticide consumption, and it is only a possibility that it might be worth our money to pay a higher price for organic produce. The key is to keep an open mind and stay up on the research.